

### **What Is Claimed Is:**

1. A premise cable connector for aiding in coupling a premise cable to an adapter, wherein the premise cable has at least one optical fiber and at least one reinforcement fiber, the premise cable connector comprising:

a crimp ring; and

a base ring having a loading edge, wherein the at least one reinforcement fiber is secured over said loading edge and underneath said crimp ring such that the radius of curvature of the at least one reinforcement fiber is less than or equal to a critical bending point radius of the at least one reinforcement fiber.

2. The premise cable connector of claim 1, wherein said critical bending point radius is a function of the diameter of said at least one reinforcement fiber, the elastic modulus of said at least one reinforcement fiber, and the tensile strength of said at least one reinforcement fiber.

3. The premise cable connector of claim 1, wherein said critical bending point radius is calculated by multiplying the diameter of said at least one reinforcement fiber by the elastic modulus of said at least one reinforcement fiber and dividing the result by two times the tensile strength of said at

4. The premise cable connector of claim 1, wherein the radius of curvature of said leading edge of said base ring is greater than or equal to said critical bending point radius of the at least one reinforcement fiber.

5. The premise cable connector of claim 3, wherein the radius of curvature of said leading edge of said base ring is greater than or equal to said critical bending point radius of the at least one reinforcement fiber.

6. A method for coupling a premise cable having at least one reinforcing fiber and at least one optical fiber to an adapter using a crimp style connector without reducing the load bearing strength of the at least one reinforcement fibers, the method comprising the steps of:

calculating a critical bending point radius of the at least one reinforcement fiber;

selecting a base ring having a leading edge having a first radius of curvature, wherein said first radius of curvature is greater than or equal to said calculated critical bending point radius;

securing the at least one reinforcement fiber around a leading edge of said base ring; and

crimping a crimp ring over said base ring.

7. The method of claim 6, wherein the step of calculating a critical bending point radius of the at least one reinforcement fiber comprises the steps of:

determining the diameter of said at least one reinforcement fiber;

determining the tensile strength of said at least one reinforcement fiber;

determining the elastic modulus of said at least one reinforcement fiber; and

calculating a critical bending point radius of the at least one reinforcement fiber by multiplying the diameter of said at least one reinforcement fiber by the elastic modulus of said at least one reinforcement fiber and dividing the result by two times the tensile strength of said at least one reinforcement fiber.

8. A method for coupling a premise cable having at least one reinforcing fiber and at least one optical fiber to an adapter using a crimp style connector without reducing the load bearing strength of the at least one reinforcement fiber, the method comprising the steps of:

selecting a base ring having a leading edge having a first radius of curvature;

selecting a reinforcement fiber having a critical bending point radius that is less than or

9. The method of claim 8, wherein the steps of selecting a reinforcement fiber having a critical bending point radius that is less than or equal to said first radius of curvature and securing the at least one reinforcement fiber around a leading edge of said base ring comprises the steps of:

selecting at least one reinforcement fiber;

determining the diameter of said at least one reinforcement fiber;

determining the tensile strength of said at least one reinforcement fiber;

determining the elastic modulus of said at least one reinforcement fiber; and

calculating a critical bending point radius of the at least one reinforcement fiber by multiplying the diameter of said at least one reinforcement fiber by the elastic modulus of said at least one reinforcement fiber and dividing the result by two times the tensile strength of said at least one reinforcement fiber;

comparing said critical bending point radius to said first radius of curvature; and

securing the at least one reinforcement fiber around a leading edge of said base ring when said critical bending point radius is less than or equal to said first radius of curvature.